Gulf of Mexico Harmful Algal Bloom Bulletin

17 October 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

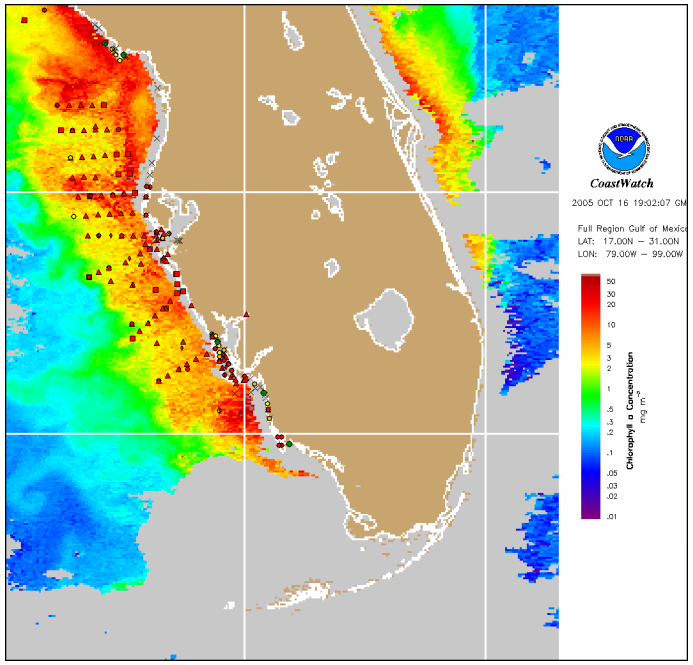
Last bulletin: October 13, 2005

Conditions: Harmful algal blooms have been identified in Florida from Pinellas to Collier County, Dixie to Levy County, and in patches along Alabama and the Florida Panhandle. Very low impacts expected from Pinellas to Collier County and from Dixie to Levy Counties through Thursday. Patchy moderate impacts possible from Franklin to Okaloosa County, FL, and in Baldwin County, AL. Patchy low impacts possible in Wakulla, Santa Rosa, Escambia Counties in FL, and Mobile County, AL. Dead fish have been reported over the last few days in Collier, Okaloosa, and Taylor counties. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide.

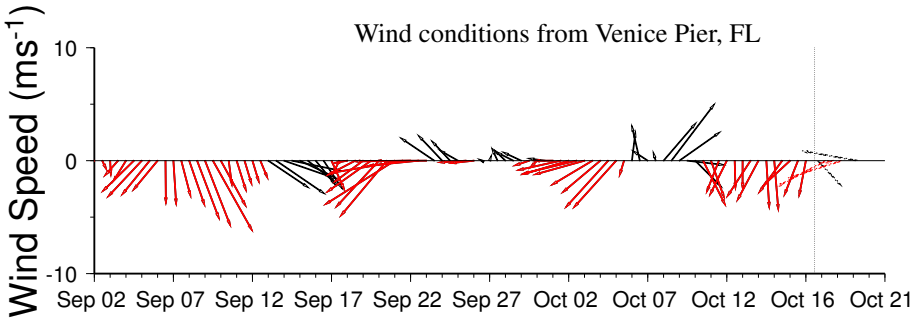
Analysis: The bloom persists along SW Florida from Pinellas to Collier County, but appears to have weakened significantly in the past week. Chlorophyll concentrations have dropped below 15μg/L along the coast from Tampa Bay to Charlotte Harbor, although they still remain very high near Naples (>50μg/L), which is largely attributed to the presence of diatoms. There is a patch of elevated chlorophyll offshore Pinellas County from 28°2'N 83°28'W to 27°45'N 83°1'W. Sampling is recommended. Cell counts in most locations from Pinellas to Collier County have decreased. Medium counts were still reported October 11 in northern Pinellas County (FWRI), and at New Pass. As of Oct. 11-13, *K. brevis* was not present along the majority of the coast from southern Charlotte to northern Collier County, with primarily low and very low counts along the rest of the SW Florida coast. Northeasterly to easterly winds throughout the week will decrease potential for coastal impacts and is likely to continue dissipating the bloom onshore.

Present to very low concentrations of *K. brevis* were reported Oct. 10-11 onshore NW Levy and SE Dixie Counties (FWRI). Chlorophyll concentrations remain high offshore with a maximum chlorophyll over 60μg/L at 28°49N 83°26W. Northeasterly to easterly winds will decrease coastal impacts although reports of dead fish are possible as well as discolored water offshore. Offshore transport likely.

-Stolz and Fisher

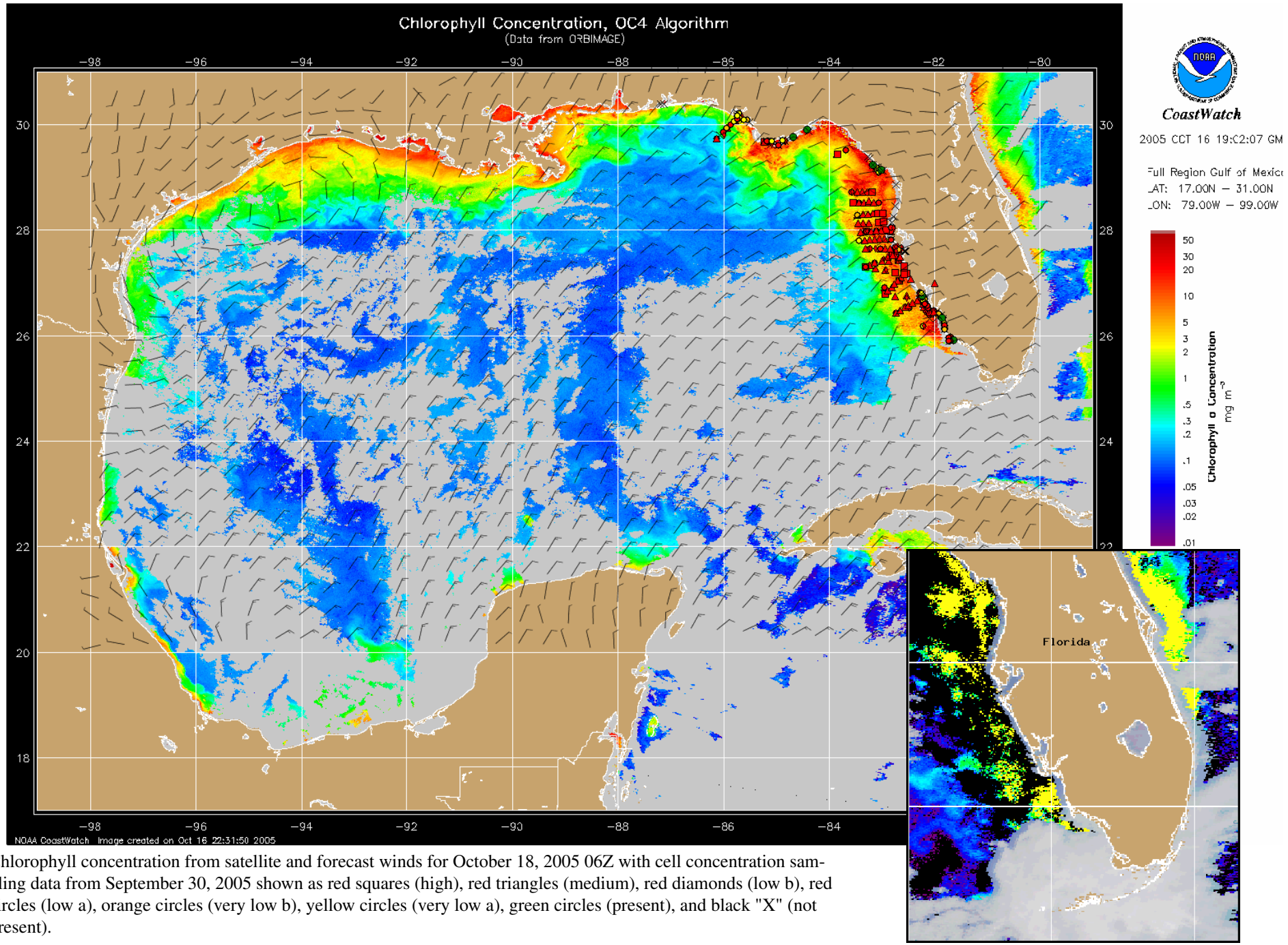


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from September 30, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Northerly winds today becoming east to northeasterly through Wednesday at about 10 knots (5 m/s). Easterly winds Wednesday night and Thursday at 15 knots (8m/s).



Chlorophyll concentration from satellite and forecast winds for October 18, 2005 06Z with cell concentration sampling data from September 30, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)

Wind conditions from Cedar Key, FL